

Application No. 10/051,297
Docket No. 740116-358
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In the Abstract:

Please amend the abstract as set forth on the appended copy thereof.

ABSTRACT

An electrical transducer ~~using the two-wire process~~ has a sensor outputting a value corresponding to the quantity ~~which is~~ to be measured, an analog end stage ~~that is~~ connected downstream of the sensor, a processor circuit, and an analog measurement signal transmission path. The end stage converts the sensor output signal ~~of the sensor~~ into an impressed output current ~~with a related to the magnitude~~ ~~which is a measure~~ of the quantity to be measured, ~~wherein~~ and the electronic transducer ~~can~~ be controlled with the processor circuit. ~~Furthermore, the~~ The electrical transducer can be scaled by the user, has low inherent power consumption and ~~still~~ ensures high response speed ~~in that~~ because the processor circuit in normal operation is shifted temporarily into a sleep mode, in the analog measurement signal transmission path an analog scaling unit is inserted, the output signal of the sensor and at least one analog setting value are supplied to the analog scaling unit, and the output signal of the analog scaling unit is supplied to the analog end stage.